

CLAIMS

I claim:

- 5 1. A scatter/gather list comprising:
 a plurality of scatter/gather list sections
 stored in a memory wherein at least one
 scatter/gather list section comprises:
 a plurality of data elements, wherein
10 each data element comprises:
 an end-of-list flag; and
 an end-of-section flag.
2. The scatter/gather list of Claim 1 wherein
15 said end-of-list flag has a same value in said each
 data element.
3. The scatter/gather list of Claim 1 wherein
 said end-of-section flag has a same value in said each
20 data element.
4. The scatter/gather list of Claim 1 wherein
 said end-of-section flag has a first value in a last
 data element in said plurality of data elements, and a
25 second value in all other data elements in said
 plurality of data elements.
5. The scatter/gather list of Claim 4 wherein
 said end-of-list flag has a same value in said each-
30 data element.
6. The scatter/gather list of Claim 4 wherein
 said end-of-list flag has a first value in said last
 data element in said plurality of data elements, and a

second value in all other data elements in said plurality of data elements.

7. The scatter/gather list of Claim 1 wherein
5 said end-of-list flag has a size of one bit.

8. The scatter/gather list of Claim 1 wherein
said end-of-section flag has a size of one bit.

10 9. The scatter/gather list of Claim 1 wherein
said each data element further comprises:
an address field.

10. The scatter/gather list of Claim 9 wherein
15 said end-of-list flag, and said end-of-section flag are
included within said address field.

11. The scatter/gather list of Claim 1 wherein
said each data element further comprises:
20 a length field.

12. The scatter/gather list of Claim 9 wherein
said each data element further comprises:
a length field.

25 13. The scatter/gather list of Claim 1 wherein
said at least one scatter/gather list section further
comprises:

a link element comprising:
30 an end-of-list flag; and
an end-of-section flag.

14. A scatter/gather list comprising:

a plurality of scatter/gather list sections wherein at least one scatter/gather list section comprises:

- 5 a plurality of data elements, wherein
 each data element comprises:
 an end-of-list flag;
 an end-of-section flag;
 an address field having a data
 segment address; and
10 a length field having a data
 segment length; and
 a link element comprising:
 an end-of-list flag;
 an end-of-section flag; and
15 an address field having a next list
 section address.

15. A scatter/gather list comprising:

20 a plurality of scatter/gather list sections
 wherein at least one scatter/gather list section
 comprises:

- a plurality of data elements, wherein
 each data element consists of:
 an address field comprising:
25 a data segment address;
 an end-of-list flag; and
 an end-of-section flag; and
 a link element consisting of:
 an address field comprising:
30 a next list section address;
 an end-of-list flag; and
 an end-of-section flag.

16. A structure comprising:

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19. A method comprising:

storing a scatter/gather list as a plurality
of sections in a memory, wherein each section
includes a plurality of elements wherein each
5 element comprises:

an address;

an end-of-list flag; and

an end-of-section flag

10 setting an end-of-list flag in a last data
element of a last section in said plurality of
sections; and

setting an end-of-section flag in at least
one of said plurality of sections other than said
last section.

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20. The method of Claim 19 wherein said setting
an end-of-section flag is performed on a last data
element in said at least one of said plurality of
sections other than said last section.

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21. The method of Claim 19 wherein said setting
an end-of-section flag is performed on a link element
in said at least one of said plurality of sections
other than said last section.

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